opening **1834** along at least a portion of the perimeter thereof. In some embodiments, contact face **1821** extends through opening **1834** to completely cover at least a portion of the circumference of the opening **1834**. Electrode member **1820** and/or contact face **1821** may be formed from a radiolucent conductive material such as, without limitation, conductive polymer, conductive elastomeric material, conductive carbon, and/or carbon-impregnated substrate.

Electrode member **1820** includes a junction block **1878** that is configured to facilitate operational coupling (e.g., electrical, mechanical, electromechanical) with a leadwire conductor **1877**. Advantageously, junction block **1878** may be formed from radiolucent material (e.g., conductive carbon). Electrode member **1820** and leadwire conductor **1877** may be joined using any suitable manner of connection, including without limitation, crimping, welding, brazing, overmolding, conductive adhesive.

In some embodiments, electrode member **1820** and leadwire conductor **1877** may be integrally formed. Housing **1805** includes at least one retaining rib **1806** that may provide additional support to electrode member **1820**. In some embodiments, such as without limitation, those embodiments where electrode member **1820** is formed by overmolding, the at least one retaining rib **1806** defines a cavity into which overmolding material is deposited during the manufacturing process, which, in turn, reduces the complexity of molds and forms required to produce ECG electrode connector **1800**.

A leadwire **1875** is received by housing **1805** via a strain relief **1879**. Leadwire **1875** includes leadwire conductor **1877** coaxially disposed within a leadwire outer insulator **1876** (e.g., an insulating jacket). As best seen in FIG. **6**, a distal portion of leadwire outer insulator **1876** is stripped away from leadwire **1875** to expose leadwire conductor **1877**. The exposed portion of leadwire conductor **1877** is positioned in a channel **1874** defined in housing **1805** that provides support to leadwire conductor **1877** and positions the distal end thereof in alignment with junction block **1878** to facilitate a secure operable connection therewith. Channel **1874** includes an s-shaped feature **1873** that is configured to provide supplemental strain relief to leadwire **1875**, e.g., to resist pullout. Advantageously, leadwire conductor **1877** and/or leadwire outer insulator **1876** are formed from radiolucent material, such as without limitation, conductive carbon.

ECG electrode connector **1800** includes an engagement member **1836** having an actuation surface **1839** and an engaging face **1837**. As shown in FIGS. **6** and **7**A, actuation surface **1839** may include one or more ergonomic features, including without limitation scallops, ridges, grooves, knurling, contouring, friction-enhancing surface(s), an elastomeric coating, an elastomeric grip, a textured grip, and/or the like. Engagement member **1836** is pivotable about a pivot **1815** to enable engaging face **1837** to move from a first position whereby engaging face **1837** is closer to contact face **1821** and a second position whereby engaging face **1837** is further from contact face **1821**. By this arrangement, the head of a press stud and/or any portion of an electrode shaft that has been introduced into opening **1834** may be operably engaged between engaging face **1837** and contact face **1821** and thereby provide a robust electromechanical coupling between connector **1800** and an electrode of an ECG pad. At least a portion of the engagement member **1836**, e.g., actuation surface **1839**, extends to an exterior portion of housing **1805** through a cutout **1808** defined in cover **1804** and/or a cutout **1809** defined in a side wall **1811** of housing **1805**.

A finger **1841** is joined to a proximal end of engagement member **1836** by a generally u-shaped resilient radiused member **1840**. In some embodiments, engagement member **1836**, resilient radiused member **1840**, and/or finger **1841** are integrally formed. Engagement member **1836**, resilient radiused member **1840**, and finger **1841** are arranged to enable tip **1843** of finger **1841** to ride along bulkhead **1842** and thereby bias engagement member **1836** towards a first position whereby engaging face **1837** is closer to contact face **1821**. Resilient radiused member **1840** may have any suitable shape, such as without limitation a u-shape as depicted in FIGS. **6** and **7**A, a semicircular shape, a v-shape, and the like. Engagement member **1836**, resilient radiused member **1840**, and/or finger **1841** are configured to provide sufficient force to bias engagement member **1836** towards the first position to secure an electrode of an ECG pad (e.g., engaging face **1837** is closer to contact face **1821**) yet enabling a user to readily depress actuation surface **1839** to effect the desired movement of the engagement member **1836** toward a second position to allow the an electrode of an ECG pad to be inserted into or released from the connector **1800**.

It will be understood that various modifications may be made to the embodiments disclosed herein. Further variations of the above-disclosed and other features and functions, or alternatives thereof, may be desirably combined into many other different systems, instruments and applications. Various presently unforeseen or unanticipated alternatives, modifications, variations or improvements therein may be subsequently made by those skilled in the art, which are also intended to be encompassed by the following claims.

What is claimed is:

1. An ECG connector assembly, comprising:

a housing having an opening defined therein configured to operably receive an electrode post of an ECG electrode pad;

an electrode member having a generally semicircular contact face disposed along at least a part of the perimeter of the opening;

an engagement member having an actuation surface and an engaging face, and pivotable about a pivot to enable the engaging face to move from a first position whereby the engaging face is closer to the contact face and a second position whereby the engaging face is further from the contact face;

a resilient radiused member coupled between a finger and a proximal end of the engagement member to join the finger to the proximal end of the engagement member and configured to bias the engagement member towards the first position; and

a leadwire configured to operatively couple the electrode member to an ECG monitor.

2. The ECG connector assembly in accordance with claim **1**, wherein at least one of the electrode member and the leadwire is formed from radiolucent material.

3. The ECG connector assembly in accordance with claim **1**, the electrode member further having a junction block configured to facilitate operational coupling with a leadwire conductor.

4. The ECG connector assembly in accordance with claim **1**, wherein the housing includes a retaining rib defining a cavity configured to retain the electrode member to the housing.

5. The ECG connector assembly in accordance with claim **1**, wherein the actuation surface includes one or more ergonomic features.

6. The ECG connector assembly in accordance with claim **5**, wherein the one or more ergonomic features are selected from the group consisting of one or more scallops, one or